D & D SUBGROUP HIGHLIGHTS
April 11, 2000

This meeting was held in the ETB, Wenatchee River Room. This meeting began at 9:00 a.m.

Laser Surface Decontamination

Norm Olsen reported on the results of a demonstration of laser ablation that he witnessed at General Lasertronics, Corp. in Milpitas, CA. A video of the demonstration was shown to the subgroup. The demo was a cold test done on samples that Hanford sent to Lasertronics. The samples had green paint and white paint visible only with UV light. The 200-watt laser operating at about 120 watts easily removed paint from all the samples. The samples were in numerous sizes and shapes. Florida International University has tested the Lasertronic system and it passed all the tests. One thing left to prove is that all material removed would be collected by a vacuum system. The Air Force is interested in using the laser system in cleaning KC-125 fuel tanks. Funding is being pursued for testing the Lasertronic system here at Hanford. A copy of the Fluor Hanford Technology Demonstration Fact Sheet on the laser system entitled "Laser Ablator for Decontamination of Metal Surfaces" will be sent to all subgroup members. If anyone has any further questions on this technology please contact Norm Olson.

DDFA Mid-Year Review

A number of subgroup members attended the DDFA FY2000 Mid-Year Review that was held in Morgantown, WV on March 28-30, 2000. Kim Koegler presented information on the status of the CDI project at the review. All CDI funding for this year has been received for a total amount of $750K from the DDFA this fiscal year. It took six months to get the last $350K from the DDFA. A ROD on U-plant is due April 2002 and this can be met without any additional funding from the DDFA. The DDFA is shifting the focus of its efforts to development of new technologies rather than deployment. Florida International University (FIU) will be an even stronger partner in the future so we should work more closely with them. We should offer up Hanford as a demonstration/testing site for new technologies.

Greg Berlin presented a status of the ASTD Robotic Work Platform Project at the midyear review. Greg also distributed copies of the agenda that included comments he made on key technologies. Greg has the two-volume set of all the presentations made at the review and if anyone wants to look at a particular presentation please contact Greg. The ASTD project at LANL was also discussed and is having problems because the building is not acceptable where the work was scheduled to be performed. We should continue working with FIU, AEA, and EPRI if possible on joint projects. AEA worked on CDI with us and is now in the 300 Area working on several projects. Contact John Duda of the DDFA to see if AEA can also help you. Greg Berlin distributed part of the PMP for the 324/327 Buildings Stabilization/Deactivation Project. The four pages are part of the project scope and included a listing of engineering/alternative studies that were recently completed as well as

a listing of 20 studies that will be required in the future. Included on the future studies list are two that AEA is now helping complete

CDI Update

Kim Koegler updated the subgroup on CDI activities. The 75-ton crane is now up and operating again after testing was completed. Cell cover blocks are now being opened using the crane. The roll-up rail tunnel door is scheduled to be opened soon. The Brokk concrete core sampler will be here next week. Training of operators on the sampler will start after the unit arrives. Of the 40 cells in U-Plant, 25 to 30 have been opened already.

ASTD Project Updates

Greg Berlin stated that the robot work platform ASTD project is moving forward. The current plan is to use the platform to decontaminate and remove equipment from the 324 Pipe Trench before tackling the B-Cell itself. They are now examining end effectors to be used to cut up pipes and remove equipment from the pipe trench. A French firm, Cybernetix, has been awarded the contract to supply the equipment by August 28, 2000. After the equipment is received it will go through acceptance testing before being used. The laser cutting and decontamination ASTD project now at LANL has received all the required equipment and assembling of the system has begun. LANL may not have a building on site that can use the laser cutting system so Hanford may have an opportunity to get the system first. The 308 Building could be offered as the Hanford demo site.

Fixative Study Results

Sue Garrett is working on a study to determine what commercially available fixatives exist that could be used in the 324 Building. Sue has identified 30 potential vendors and has feedback from 10 to 15 on their products. FIU is also working with us on gathering data from the companies. Sue will put together a report by the end of the month that will include recommendations and how to proceed. Many of the fixatives have not been used in radiation zones. Paul Scott is doing a technology assessment for Fluor and he may be willing to give the subgroup an overview of those technologies he determines to be applicable to Hanford work.

AEA Technology Support

Greg Berlin reported that AEA is working on two tasks in support of the 324 Building Stabilization and Decontamination Project. Both of the tasks receive funding from the DDFA for AEA involvement. The first task involves completion of a technology options study for accessing, characterizing, and decontaminating the 324 Building High-Level Vault Tank T-105. Upon completion of the alternatives study and down-selection, technology demonstration will take place either at AEA's facility or Hanford.

The second task that AEA is helping with is the B-cell ventilation duct remediation. The duct needs to be characterized before remediation can take place. The current plan is to use robotic equipment to traverse the duct and take samples and readings. Then a plan can be drawn up on how to decontaminate the duct. The first meeting on this task with AEA is tomorrow. AEA will then produce a report on how to proceed.

S&T Needs Process

BHI has started to gather needs for this year and has met with three project teams. They are reviewing the old needs and adding any new ones at these meetings with project individuals. Fluor will have some new needs dealing with tank heel removal.

The current needs schedule calls for the subgroup to get the needs by May 15, 2000 and to finish reviewing them in June. The needs are to be sent to DOE-HQ by July 15, 2000. This schedule may be revised in the near future. Nancy Uziemblo would like a list of needs and if any funding is being used to meet any of them and who is funding the work.

D&D Subgroup Meeting Attendees 04/11/00

Gary Ballew	PacRim	946-0611
Greg Berlin	FDH	376-2389
Bill Bonner	PNNL	372-6263
Dennis Brown	DOE-RL	372-4030
Abdul Dada	BHI	372-9190
Suzanne Garrett	PNNL	372-4266
Kim Koegler	BHI	372-9294
Norm Olson	PNNL	372-4810
Roger Pressentin	DOE-RL	376-1291
Steve Weakley	PNNL	372-4275
Nancy Uziemblo	Ecology	736-3014